Tokenizing real world assets is being delayed as regulators worry about speculative blockchain-based assets.
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Bloomberg Law

Feb. 27, 2025, 4:30 AM EST

# Tokenizing Securities Inches Toward Reality With Rule Updates

**PERSPECTIVES**

**Jenny Cieplak**
Latham & Watkins

- *Latham & Watkins attorney examines the future of securities*
- *Rules to protect investors are impeding blockchain's use*

### The Bottom Line

- Cryptocurrenices have produced a roadmap for how financial institutions can use the blockchain to hold and trade real world assets and securities.
- The technology to move securities trading onto the blockchain is in place, and some rules, like the Uniform Commercial Code's Article 12, are catching up
- The US is falling behind the rest of the world by not participating in pilot programs that move securities on-chain.

Tokenizing real world assets, or RWAs, such as securities and diamonds, is an exciting leap into the future that regulators are delaying in the US. Regulators' hesitation likely stems from the initial coin offering mania that took place mainly in 2017 and 2018, when hundreds of companies attempted to raise funds through the issuance of speculative blockchain-based assets. The Securities Exchange Commission characterized these ICOs as offerings of securities in an effort to protect investors from vaporware and outright fraud, but went further by restricting most broker-dealers from holding any digital assets on behalf of their customers.

The goal of this article is to view blockchain-based records for RWAs—securities in particular—from a different perspective and consider the ways in which financial industry participants can take advantage of existing regulatory frameworks to execute and clear transactions of RWAs on the blockchain.

### The Bitcoin Map

It is important to remember that in many cases, blockchain-based assets don't exist as such—Bitcoin and most other cryptocurrencies are functions of unspent transaction output and the Bitcoin blockchain isn't a ledger of who owns which Bitcoin, but instead a record of all the transactions in Bitcoin.

When a user transfers a Bitcoin, what they are doing is dividing the total amount of Bitcoin shown on the ledger in their wallet and splitting it between the user and the transferee, rather than selecting individual coins like they would do with physical coins in their pocket. Similarly, to "tokenize" an asset is really just to maintain the records of who owns that asset on a blockchain.

Traditional securities transactions in the indirect holding system are characterized in the same way. Stock certificates of public companies are immobilized at a central clearing counterparty, and ownership is recorded through a series of securities entitlements.

When Fund A transfers 1 million shares in Company X to Fund B, the exchange moves through a series of electronic messages between the Funds, brokers, other clearing brokers, and the central clearing counterparty. The result of this transfer is that Fund B's broker has updated its ledger showing that it received a transfer of a securities entitlement of 1 million shares in Company X on behalf of Fund B.

If Fund A transfers an additional 500,000 shares in Company X to Fund B, the same process is followed, and Fund B's broker will update its ledger to show it received the additional transfer. While other books and records will show a securities entitlement of 1.5 million shares in Company X on behalf of Fund B, the records kept by the brokers include separate transactions with different transfer dates, including different prices if necessary.

No one would think to view these records as separate assets from the shares themselves, or that these records are somehow regulated differently from the shares. And SEC rules already require Fund B's broker to maintain records of transactions with a clear audit trail. The infrastructure is already in place to tokenize securities, moving transactions onto a blockchain that connects the broker's ledger with all the parties involved in any transaction.

There could be no better audit trail than a blockchain that shows a record of all transactions. And that blockchain could be connected with the systems of the other parties involved in the transaction to ensure that everything runs smoothly and there are no errors.

To some extent, this is already accomplished in straight-through processing, an automated method of completing transactions by electronic messaging between the systems of various financial institutions. However, straight-through processing is typically accomplished only through intermediary connections, such as through exchanges or data providers. Allowing for messages to propagate through a network to all parties simultaneously could avoid future friction and eliminate potential discrepancies.

### Securities Holding Infrastructures

Though the language of cryptocurrencies is useful, we have a legal framework to consider blockchains and distributed ledgers separated from our understanding of cryptocurrencies.

A combination of state and federal laws govern the securities holding infrastructure in the US, including Article 8 of the Uniform Commercial Code. Article 8 is the legal framework, adopted by every state (some with slight variations) that governs the ownership and transfer of investment securities and other financial assets.

Most securities are held through the "indirect holding system," in which the books and records of the issuer show a single holder that issues "securities entitlements" to various brokers. These brokers will in turn issue security entitlements to their customers, or to other brokers who will issue security entitlements to their customers. In other words, rather than each individual holder receiving a stock certificate, records of beneficial ownership are maintained through intermediaries.

When Bitcoin first became a topic of discussion among legal professionals, practitioners looked to Article 8 to govern an indirect holding system for digital assets. They reasoned that digital assets could be treated as financial assets under Article 8, which could then define a series of rights and duties for digital asset custodians and, importantly, establish a framework for obtaining security interests in digital assets.

While assets besides securities aren't automatically covered by Article 8, if a custodian were to agree to treat digital assets as "financial assets" under the UCC, their customers would have the same advantages as holders of securities, including the ability to use those digital assets as collateral and provide the secured party with a perfected security interest. Digital assets are, in many cases, already held through an indirect holding system similar to the indirect holding system for securities with custodians, sub-custodians, and beneficial owners.

In the indirect holding system for securities, clearing brokers maintain accounts at the central clearinghouse or at another broker in the chain of ownership. The clearing broker maintains separate accounts for its customers on its own books and records, but has an omnibus account at the clearinghouse that reflects the aggregate of these customers' interests. Each of these accounts is a securities entitlement representing a claim.

These books and records have taken various forms over the years, from written ledgers to tapes to electronic systems. Prior to January 2023, the SEC required brokers to maintain their electronic books and records "exclusively in a non-rewriteable, non-erasable format," which presented issues in the days of cloud storage. In 2023, the SEC amended its recordkeeping rules to permit firms to use electronic records that provide for a complete audit trail that enables the recreation of an original record if it is modified or deleted.

There is no specific requirement for the type of database in which these records must be stored, so long as the audit trail requirements are met. A blockchain would certainly fulfill the audit trail requirements as long as the required information, such as time-stamping, is included. And importantly, there doesn't appear to be a prohibition on using peer-to-peer connectivity to maintain these books and records—although the firm would need to be comfortable that the system and its participants were trustworthy. Firms may initially desire to maintain their books and records as connected to, but not solely via, a blockchain until further guidance from the SEC is available.

The creation of these securities books and records creates the securities entitlement rights set out in Article 8, but the records themselves don't represent a separate interest. These rights can be recorded in written or electronic form, but the ink or computer code doesn't replace the rights—if a copy of a ledger is made, the beneficial owner doesn't suddenly have an entitlement to twice the number of securities that it did before.

And the beneficial owner doesn't obtain an ownership interest in the written ledger or the computer code. Similarly, it doesn't appear necessary for a beneficial owner to have a separate interest in whatever record exists on the blockchain as long as the broker has agreed that it will maintain the securities entitlement on behalf of the beneficial owner.

### Article 12 Complications

In 2019, the Uniform Law Commissioners began working on updates to the UCC, including what would become a new Article 12. What became known as the 2022 amendments had the express intent of modernizing the UCC to accommodate emerging technologies, including distributed ledgers.

The 2022 amendments had the effect of clarifying that blockchain-based assets, which are part of a group of assets referred to in the UCC as "controllable electronic records," could indeed be financial assets for purposes of UCC Article 8. This codified the position taken by digital assets practitioners prior to that date.

However, the 2022 amendments haven't been adopted by every state—the critical state of New York has introduced legislation adopting Article 12 but it hasn't yet been enacted into law. In states that haven't yet adopted Article 12, Article 8 will still allow financial intermediaries to hold digital assets on behalf of their customers and to use distributed ledgers for books and records purposes (just as they can in states that have adopted Article 12 and the 2022 amendments).

In addition, the commissioners' comments to the 2022 amendments didn't state that all records evidencing financial assets would constitute specifying that Article 12 doesn't apply to the rights of an entitlement holder in a CER. In other words, when a CER is held by a securities intermediary, the principles of Article 12 don't apply and instead the securities entitlement is governed by Article 8.

Thus in the indirect holding system, where all trading takes place through securities entitlements and a nominee holds the certificates immobilized, Article 12 doesn't apply to the relationship between an intermediary holding a CER on behalf of a beneficial holder.

Article 8 doesn't put any technical restrictions on how an entitlement order may be delivered. Typically, a securities intermediary will specify in account opening or other documents the means by which entitlement orders may be delivered, and these documents could refer to entitlement orders made through messages recorded on a distributed ledger.

The intermediary could use a digital token (which, in states that have adopted the 2022 Amendments, may be a CER subject to Article 12) as a means for delivering entitlement orders, but the rights in the securities themselves would be governed by Article 8.

Article 8 as revised by the 2022 amendments specifically states that a CER doesn't, in and of itself, constitute a security—which is still the bundle of rights associated with the issuer such as the right to vote or receive dividends. The commentary to the 2022 amendments suggests that a CER could constitute an "instruction" to the issuer of an uncertificated security (and presumably as an entitlement order to the securities intermediary for a securities entitlement).

However, reliance on the "instruction" concept in Article 12 for securities transactions doesn't mean that the securities themselves have become "tokenized." As the commissioners noted, use of a CER doesn't move an underlying asset onto the distributed ledger. Holding an interest in the record isn't sufficient to establish ownership of the underlying asset unless there is an agreement that the record evidences the rights in the asset.

Securities markets have evolved such that the books and records of intermediaries are agreed by all parties to represent the right to the underlying assets (the securities entitlements themselves). The markets could evolve further to posit that these books and records could be updated through peer-to-peer connectivity using a distributed ledger. This should be viewed not as a drastic change but as a natural evolution in technology.

### Blockchain's Promises

Some regulators have encouraged the use of blockchain-based records and have outlined ways that traditional financial institutions could provide services to their users related to digitally native assets. However, other regulators have been hesitant to adopt blockchain-based records, even going so far as to adopt rules and regulations effectively prohibiting them.

The SEC and the Financial Industry Regulatory Authority issued a joint statement in 2019 effectively prohibiting registered broker-dealers from holding digital assets on behalf of their customers, stating it may be impossible for broker-dealers to establish they have "control" over digital assets in order to comply with customer protection rules. This prohibition covers all "digital asset securities," comprising many cryptocurrencies as well as securities whose records are maintained on a distributed ledger.

While the SEC issued guidance in 2021 allowing a narrow subset of broker-dealers to maintain blockchain-based records, this guidance is extremely narrow as it is limited to broker-dealers who only deal in digital asset securities.

Because most large broker-dealers deal in many types of securities and have legacy recordkeeping systems that would need to be transitioned to blockchain-based systems over time, it is unsurprising that pilot projects related to blockchain-based securities records have taken place in the UK, the EU, and Singapore, but not the US.

In the frenzy of litigation regarding projects that used ICOs for fundraising while trying to skirt regulations meant to protect investors, the industry seems to have forgotten the initial promise of blockchain for the financial industry—that outdated systems could be replaced with technology to streamline the process of execution and clearing of trades, that data reconciliation could occur automatically by connecting the systems of various financial intermediaries, and that reporting could be automated by including self-regulatory organizations as observers.

While realizing that dream may be far off, there is no reason for the industry to be subject to additional regulatory impairments through creating separate interests in digital records when the legal infrastructure already exists to support recording RWA transactions on-chain.

*This article does not necessarily reflect the opinion of Bloomberg Industry Group, Inc., the publisher of Bloomberg Law and Bloomberg Tax, or its owners.*

### Author Information

Jenny Cieplak is partner in the New York office of Latham & Watkins.

To contact the editors responsible for this story:
Max Thornberry at jthornberry@bloombergindustry.com;
Jessie Kokrda Kamens at jkamens@bloomberglaw.com